Map of parcels at 31 kft on 04071017 influenced by convection 0.0 to 2.5 days earlier Squares indicate location of convectively influenced air -- influence calculated only within black box Crosses indicate locations where back trajectories from squares intersect convection Cross, square, and trajectory colors indicate elapsed time between convection and 04071017 2.5 2.0 Days Since Convection 1.5 1.0 0.5 0.0 NASA/ARC **PSL** Last Image Used is 0407101645 :1320 Trajectories

Map of parcels at 31 kft on 04071017 influenced by convection 2.5 to 5.0 days earlier Squares indicate location of convectively influenced air -- influence calculated only within black box Crosses indicate locations where back trajectories from squares intersect convection Cross, square, and trajectory colors indicate elapsed time between convection and 04071017 5.0 Days Since Convection 4.0 3.5 3.0 2.5 NASA/ARC ast Image Used is 0407101645 **PSL** 1320 Trajectories

Map of parcels at 31 kft on 04071017 influenced by convection 5.0 to 7.5 days earlier Squares indicate location of convectively influenced air -- influence calculated only within black box Crosses indicate locations where back trajectories from squares intersect convection Cross, square, and trajectory colors indicate elapsed time between convection and 04071017 7.0 Days Since Convection 6.5 6.0 5.5 5.0 NASA/ARC Last Image Used is 0407101645 **PSL** 1320 Trajectories

Map of parcels at 31 kft on 04071017 influenced by convection 7.5 to 10.0 days earlier Squares indicate location of convectively influenced air influence calculated only within black box Crosses indicate locations where back trajectories from squares intersect convection. Cross, square, and trajectory colors indicate elapsed time between convection and 04071017. 9.5 Days Since Convection 9.0 8.5 8.0 7.5 NASA/ARC **PSL** Last Image Used is 0407101645 1320 Trajectories